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10/713,763

11/14/2003

Patrick A. Hosein

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EXAMINER

LEVITAN, DMITRY

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

01/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/713,763

Applicant(s)

HOSEIN, PATRICK A.

Examiner

Dmitry Levitan

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 40 limitations, directed to “reverse link data rates of more than a defined fraction of mobile stations” are unclear as written.

Claims 18 and 22, 23 limitations, directed to “if a targeted reverse link loading cannot be substantially maintained by broadcasting the rate control commands” are unclear, because they contradict the other limitations of claim 18, directed to “broadcasting rate control commands to adjust reverse link data rates.. and affect reverse link loading”.

Claim 33 recites the limitation "the rate control commands" in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-16, 19, 20, 21, 24-32, 34-39 and 41-56 are rejected as the claims depending on the claims rejected above.

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 33 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen (US 5,923,650).

Regarding claim 33, Chen teaches method of reverse link rate control in a mobile station for use in a wireless communication network (wireless network as shown on Fig. 1 and 2 and disclosed on 6:15-7:57), the method comprising:

responding to the rate control commands if in a first mode (mobile station 6a is responding to rate control commands of base station 4c, if it is located in 2c cell, as shown on Fig. 1);  
not responding to the rate control commands if in second mode (mobile station 6a will not respond to control commands of base stations 4c, if the mobile station 6a moves to cell 2a, because base station 4c exclusively communicates with the mobile stations in cell 2c); and  
operating in the first mode or the second mode according to an indication received from the network (mobile station 6a operates in one of the cells in cell 2c or cell 2a, as shown on Fig. 1).

Regarding claim 34, Chen teaches adjusting reverse link data responsive to the rate commands, as shown on Fig. 2 and disclosed on 7:45-55.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18, 21, 26 and 33-35 are rejected (as best understood) under 35 U.S.C. 103(a) as being unpatentable over Lee (US 7,031,741).

7. Regarding claims 18, 21, 26 and 33-35, Lee substantially teaches the limitations of the claims:

A method of managing of a reverse link in a wireless communication network (estimating reverse quality information between a mobile station and a base station, as disclosed on 5:3-38), the method comprising:

assigning selected ones in a plurality of mobile stations as members in a set of rate-controlled mobile stations (assigning mobile stations in data rates group A, as disclosed on 5:62-6:21);  
broadcasting rate control commands to adjust reverse link data rates of the rate-controlled mobile stations and thereby affect reverse link by the rate-controlled mobile stations (broadcasting approval message commands to the mobile stations, which are requesting a change of their data groups, as disclosed on 6:34-54); and  
adjusting membership in the set of rate-controlled mobile stations if a targeted reverse link quality goal cannot be substantially maintained by broadcasting the rate control commands (adding and dropping out of the data rates groups A, B and C, depending on the reverse quality information control bit, as disclosed on 6:62-7:7).

Lee does not teach loading of the reverse link.

Official notice is taken that loading of an existing communication link is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add loading of the reverse link to the system of Lee to improve the system efficiency by fully utilizing the reverse link by permitting the mobile customers transmit at higher data rates with acceptable quality of the link.

In addition, regarding claims 33 and 34, Lee teaches mobile stations operating in two modes, two (or more) data rate groups and the base station approving or disapproving/responding or not responding to the mobile stations requests to move from one data group to the other and therefore operating in the appropriate data group according the base station response.

Lee does not teach sending no response instead of a negative response to the mobile station request.

Official notice is taken that interpreting lack of response as a negative decision of the base station to the mobile station request is well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add sending no response instead of a negative response to the mobile station request to the system of Lee to improve the system efficiency by eliminating a transmission of negative command from the base station.

In addition, regarding claim 35, Lee teaches the mobile station keeping a defined minimum rate of the lower data rate group/minimum rate as a result of the negative response from the base station.

In addition, regarding claim 21, Lee teaches the base station sending dedicated reverse rate control bit to all mobile stations to indicate the quality of the reverse link in response to selected data rate, as disclosed on 5:25-37.

In addition, regarding claim 26, Lee teaches performing data rate control based on a fairness goal, as the station receives approval on the request for a data rate increase only if the request does not decrease the quality of all other mobile stations communicating on the reverse link, as disclosed on 6:34-61.

*Allowable Subject Matter*

8. Claims 1-16 and 40-56 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'DL' followed by a stylized, cursive signature.

Dmitry Levitan  
Primary Examiner  
Art Unit 2616

**DMITRY LEVITAN  
PRIMARY EXAMINER**